

**REMARKS**

Claims 1-3, 5-18, 20-26, 28, 29 and 31 were pending. New claims 32-46 are added. New claims 32-41 recite that the whey protein preparation was prepared by treating the whey proteins with a protease in a ratio of between about 0.1-5% w/w protease:whey protein; 0.5-1% w/w protease:whey protein; 0.1-500 mAU/g whey protein; 1-50 mAU/g whey protein; and 10-25 mAU/g whey protein. The new claims are supported by the specification at page 8, lines 10-17.

It is respectfully submitted that the present response presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the following remarks is requested.

**I. The Rejection of Claims 1-3, 5-18, 20-26, 28, 29 and 31 under 35 U.S.C. 112**

Claims 1-3, 5-18, 20-26, 28, 29 and 31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which is not described in the specification in such a way as to enable the artisan to make or use the invention. The Office states that the specification does not teach what is encompassed by "improved meltability." This rejection is respectfully traversed.

It is respectfully submitted that the specification does teach what is encompassed by "improved meltability." Improved meltability is a property of the cheese product which can be specifically measured, as described, for example, in Example 2, page 14, lines 18-30. In particular, as described Example 2, the meltability improvement was measured by i) grinding the cheese samples in a blender for 20 seconds; (ii) molding 3 g of the ground cheese into a 2.2 cm metal ring and (iii) placing the ring in the center of a glass petri dish. The cheese samples were then heated in an oven at 100°C for 14 minutes. The area taken up by the cheese was measured before and after melting. Meltability was calculated as follows:

$$\text{Meltability} = \frac{\text{Area After Melt} - \text{Area Before Melt}}{\text{Area Before Melt}} \times 100$$

As recited in the claims, improved meltability of the cheese is compared to the meltability of cheese made using an unhydrolyzed whey protein preparation.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112 as an artisan would be able to determine whether a cheese has improved meltability. Applicants respectfully request reconsideration and withdrawal of the rejection.

**II. The Rejection of Claims 1-3, 5-18, 20-26, 28, 29 and 31 under 35 U.S.C. 103**

Claims 1-3, 5-18, 20-26, 28, 29 and 31 are rejected under 35 U.S.C. 103 as being unpatentable over Marshall (GB 2324236). Marshall does not teach the use of hydrolyzed whey protein. Nevertheless, the Office contends that the hydrolysis of whey protein is well-known in the art and it would be obvious to use such method in the process of Marshall. The Office also directs Applicant to the statements made in the specification that "[w]hey proteins for use in the present invention may be obtained by any method known in the art." This rejection is respectfully traversed.

It is respectfully submitted that a showing of unexpected results has been made. The Office is directed to Example 2 which shows that surprisingly, the use of hydrolyzed whey protein in the claimed cheese making processes of the present invention results in cheese having improved meltability as compared to cheese made by the same process, but with unhydrolyzed whey protein. This showing is commensurate in scope with the claims because the claims recite that the method results in cheese having improved meltability compared to cheese made using an unhydrolyzed whey protein preparation.


For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 103. Applicants respectfully request reconsideration and withdrawal of the rejection.

**III. Conclusion**

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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